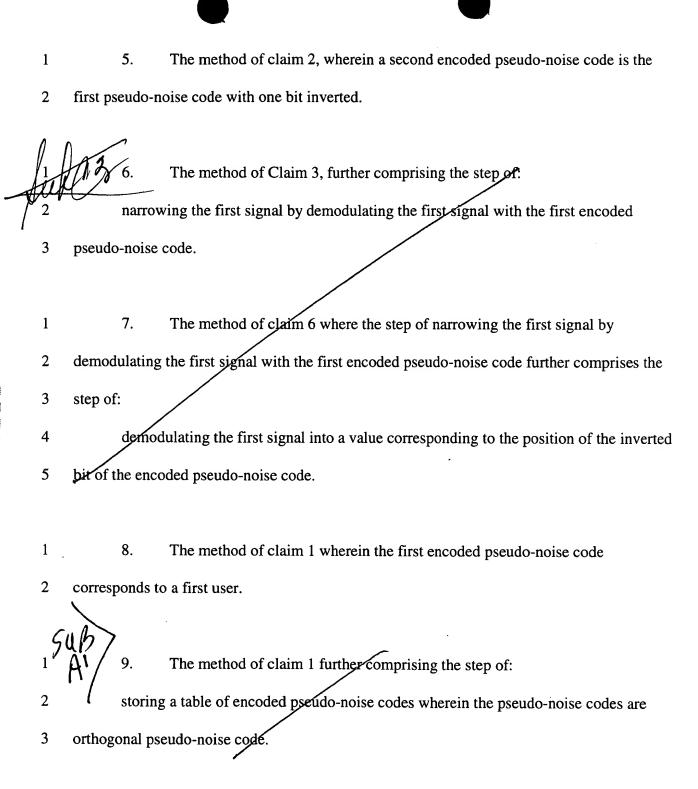# CLAIMS

What is claimed is:

1   ~~1.~~   ~~A method for achieving high bit densities in a direct-sequence spread spectrum~~

2   communication system by using encoded spreading codes, the method comprising the steps

3   of:

4   creating a first encoded pseudo-noise code;

5   spreading a first signal by modulating the first signal with the first encoded pseudo-

6   noise code.

      2.   The method of claim 1, wherein the step of creating a first encoded pseudo-

2   noise code comprises the step of:

3   modifying a first pseudo-noise code to create the first encoded pseudo-noise code.

1   3.   The method of claim 2, wherein the first encoded pseudo-noise code is the first

2   pseudo-noise code with one bit inverted.

1   4.   The method of claim 3 wherein the position of the one inverted bit of the first

2   encoded pseudo-noise code corresponds to the value of the first signal.

1   5.   The method of claim 2, wherein a second encoded pseudo-noise code is the

2   first pseudo-noise code with one bit inverted.

1   6.   The method of Claim 3, further comprising the step of:

2   narrowing the first signal by demodulating the first signal with the first encoded

3   pseudo-noise code.

1   7.   The method of claim 6 where the step of narrowing the first signal by

2   demodulating the first signal with the first encoded pseudo-noise code further comprises the

3   step of:

4   demodulating the first signal into a value corresponding to the position of the inverted

5   bit of the encoded pseudo-noise code.

1   8.   The method of claim 1 wherein the first encoded pseudo-noise code

2   corresponds to a first user.

1   9.   The method of claim 1 further comprising the step of:

2   storing a table of encoded pseudo-noise codes wherein the pseudo-noise codes are

3   orthogonal pseudo-noise code.

1   10.   The method of claim 9 further wherein a second encoded pseudo-noise code

2   located in the table corresponds to a second user.

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